BRUHAT BANGALORE MAHANAGARA PALIKE

Project: Improvements to Roads and Drains at Manjunatha Nagara in Ward No 06 Byatarayanapura Sub Division

Construction Cost: 5000000.00

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.133, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Desilt	Cum							
	Manjunatha Nagara								
	1st Cross Connecting ORR		2	135.00	0.45	0.45	54.68		
	Cross Road in 5th Cross		1	30.00	0.45	0.45	6.08		
			1	30.00	0.45	0.45	6.08		
			2	110.00	0.45	0.45	44.55		
			2	112.00	0.45	0.45	45.36		
	New BS Slab Drain								
			1	35.00	0.60	0.60	12.60		
	Defence Layout 1st Main								
	1st Cross		2	202.00	0.60	0.60	145.44		
	2nd Cross		2	75.00	0.60	0.60	54.00		
	3rd Cross		1	52.00	0.60	0.60	18.72		
	4th Cross		1	56.00	0.60	0.60	20.16		
							407.66	170.92	**69677.25**
	Basic rate	**82.00**							
	Loading and unloading with 5km lead= 68+2.5x1.28x10 =	**84.00**							
	Area Weightage 6%	**4.92**							
	Final Rate	**170.92**							
2	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(5.31.1								
	Drain	Cum							
	Manjunatha Nagara								
	New BS Slab Drain		1	35.00	1.35		47.25		
	Defence Layout 1st Main								
	1st Cross		2	202.00	1.35		545.40		
	2nd Cross		2	75.00	1.35		202.50		
	3rd Cross		1	52.00	1.35		70.20		
	4th Cross		1	56.00	1.35		75.60		
							940.95	665.68	**626371.60**
	Basic rate	**628.00**							
	Area Weightage 6%	**37.68**							
	Final Rate	**665.68**							

	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
3	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No. 12/I.No. 4.2 of CSR 2015-16)								
	Road	Cum							
	Manjunatha Nagara								
	Cross Road in 5th Cross		1	30.00	1.00	0.20	6.00		
			1	30.00	1.00	0.20	6.00		
			1	25.00	0.90	0.20	4.50		
			1	25.00	0.90	0.20	4.50		
			1	110.00	1.20	0.20	26.40		
			1	112.00	1.20	0.20	26.88		
							74.28	5348.76	**397305.89**
	Basic rate	**5046.00**							
	Area Weightage 6%	**302.76**							
	Final Rate	**5348.76**							
4	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M20 (at 300Kg per cum coarse aggregate @ 0.64cum and fine aggregate @ 0.43cum)(22.2.6)								
	Road	Cum							
	Manjunatha Nagara								
	Cross Road in 5th Cross		1	30.00	4.80	0.15	21.60		
			1	30.00	3.80	0.15	17.10		
			1	25.00	4.50	0.15	16.88		
			1	25.00	4.30	0.15	16.13		
			1	110.00	4.40	0.15	72.60		
			1	112.00	4.80	0.15	80.64		
							224.94	5508.82	**1239153.97**
	Basic rate	**5197.00**							
	Area Weightage 6%	**311.82**							
	Final Rate	**5508.82**							
5	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.(22.7)								
	Road	Cum							
	Manjunatha Nagara								
	Cross Road in 5th Cross		1	30.00	4.80		144.00		
			1	30.00	3.80		114.00		
			1	25.00	4.50		112.50		

Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
		1	25.00	4.30		107.50		
		1	110.00	4.40		484.00		
		1	112.00	4.80		537.60		
						1499.60	95.40	**143061.84**
Basic rate	**90.00**							
Area Weightage 6%	**5.40**							
Final Rate	**95.40**							
KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.142, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
5								
Bad Reaches	Cum							
		5	2.00	2.50	0.23	5.75		
		3	0.50	6.00	0.23	2.07		
UGD Restoration		1	135.00	1.00	0.23	31.05		
						38.87	132.76	**5160.38**
Basic rate	**46.00**							
Loading and unloading with 5km lead= 68+2.5x1.28x10 =	**84.00**							
Area Weightage 6%	**2.76**							
Final Rate	**132.76**							
KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 3051 (P.No.142, I.No.19.60 of PW,P&IWTD S.R 2016-17)								
7								
Defence Layout 1st Main	Cum							
1st Cross		1	202.00	5.50	0.20	222.20		
2nd Cross		1	75.00	5.50	0.20	82.50		
3rd Cross		1	52.00	5.50	0.20	57.20		
4th Cross		1	56.00	5.50	0.20	61.60		
						423.50	320.12	**135570.82**
Basic rate	**302.00**							
Area Weightage 6%	**18.12**							
Final Rate	**320.12**							
KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.157, I.No.20.18 of PW,P&IWTD SR 2016-17)								
8								
Bad Reaches	Cum							
		5	2.00	2.50	0.23	5.75		
		3	0.50	6.00	0.23	2.07		
UGD Restoration		1	135.00	1.00	0.23	31.05		
Defence Layout 1st Main								
1st Cross		1	202.00	5.50	0.23	255.53		
2nd Cross		1	75.00	5.50	0.23	94.88		

	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	3rd Cross		1	52.00	5.50	0.23	65.78		
	4th Cross		1	56.00	5.50	0.23	70.84		
							525.90	1768.08	**929824.43**
	Basic rate	**1668.00**							
	Area Weightage 6%	**100.08**							
	Final Rate	**1768.08**							
9	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.160, I.No.21.6 of PW,P&IWTD SR 2016-17)								
	Bad Reaches	Sqm							
			5	2.00	2.50	--	25.00		
			3	0.50	6.00	--	9.00		
	UGD Restoration		1	135.00	1.00	--	135.00		
	Defence Layout 1st Main								
	1st Cross		1	202.00	5.50	--	1111.00		
	2nd Cross		1	75.00	5.50	--	412.50		
	3rd Cross		1	52.00	5.50	--	286.00		
	4th Cross		1	56.00	5.50	--	308.00		
							2286.50	27.56	**63015.94**
	Basic rate	**26.00**							
	Area Weightage 6%	**1.56**							
	Final Rate	**27.56**							
0	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.160, I.No.21.2 of PW,P&IWTD SR 2016-17)								
	Road Formation	Sqm							
	Manjunatha Nagara								
	1st Cross Connecting ORR		1	135.00	5.30	--	715.50		
							715.50	3.18	**2275.29**
	Basic rate	**3.00**							
	Area Weightage 6%	**0.18**							
	Final Rate	**3.18**							
1	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.160 I.No.21.7 of PW,P&IWTD SR of 2016-17)								
	For Laying BC	Sqm							
	Manjunatha Nagara								
	1st Cross Connecting ORR		1.00	135.00	5.30	--	715.50		
	Defence Layout 1st Main								
	1st Cross		1.00	202.00	5.50	--	1111.00		
	2nd Cross		1.00	75.00	5.50	--	412.50		
	3rd Cross		1.00	52.00	5.50	--	286.00		
	4th Cross		1.00	56.00	5.50	--	308.00		
							2833.00	11.66	**33032.78**
	Basic rate	**11.00**							
	Area Weightage 6%	**0.66**							
	Final Rate	**11.66**							

	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
2	KSRRB M500-19. Providing and laying bituminous concrete 40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 6% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.164 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)								
	Road Formation	Cum							
	Manjunatha Nagara								
	1st Cross Connecting ORR		1	135.00	5.30	0.04	28.62		
	Defence Layout 1st Main								
	1st Cross		1	202.00	5.50	0.04	44.44		
	2nd Cross		1	75.00	5.50	0.04	16.50		
	3rd Cross		1	52.00	5.50	0.04	11.44		
	4th Cross		1	56.00	5.50	0.04	12.32		
							113.32	7083.98	**802756.61**
	Basic rate	**6683.00**							
	Area Weightage 6%	**400.98**							
	Final Rate	**7083.98**							
3	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.197, I.No.24.15 of PW,P&IWTD SR 2016-17)								
	Edge line								
			2	520.00	0.10	--	104.00		
							104.00	542.72	**56442.88**
	Basic rate	**512.00**							
	Area Weightage 6%	**30.72**							
	Final Rate	**542.72**							
							Total Construction Cost		**4503649.68**
4							**Tender Premium 10%**		**450364.97**
5							**Cost towards Third Party Inspection @ 1%**		**45036.50**
							Sub Total		**4999051.14**
6							**Miscellaneous and rounding off**		**948.86**
							Total		**5000000.00**

ADMINISTRATIVE APPROVAL
Accorded For Rs. Fifty lakhs only
Head of A/c. P-3111
Div. Ref. No. 100/17-18 Date 19/12/17
AE 9/12
EE(BTP) 19/12

Technical Sanction
Accorded For 50.00 lakhs only
Head of A/C P3111
CER NO TS/4685/12-17 Dt. 25/12
TA CE (YNK)

ertificate.

1 The workspot was inspected and work is found to be necessary.
2 The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
4 The provisions made in the estimate are necessary and essential.

ssistant Engineer

Assistant Executive Engineer

Executive Engineer

Manjunatha layout

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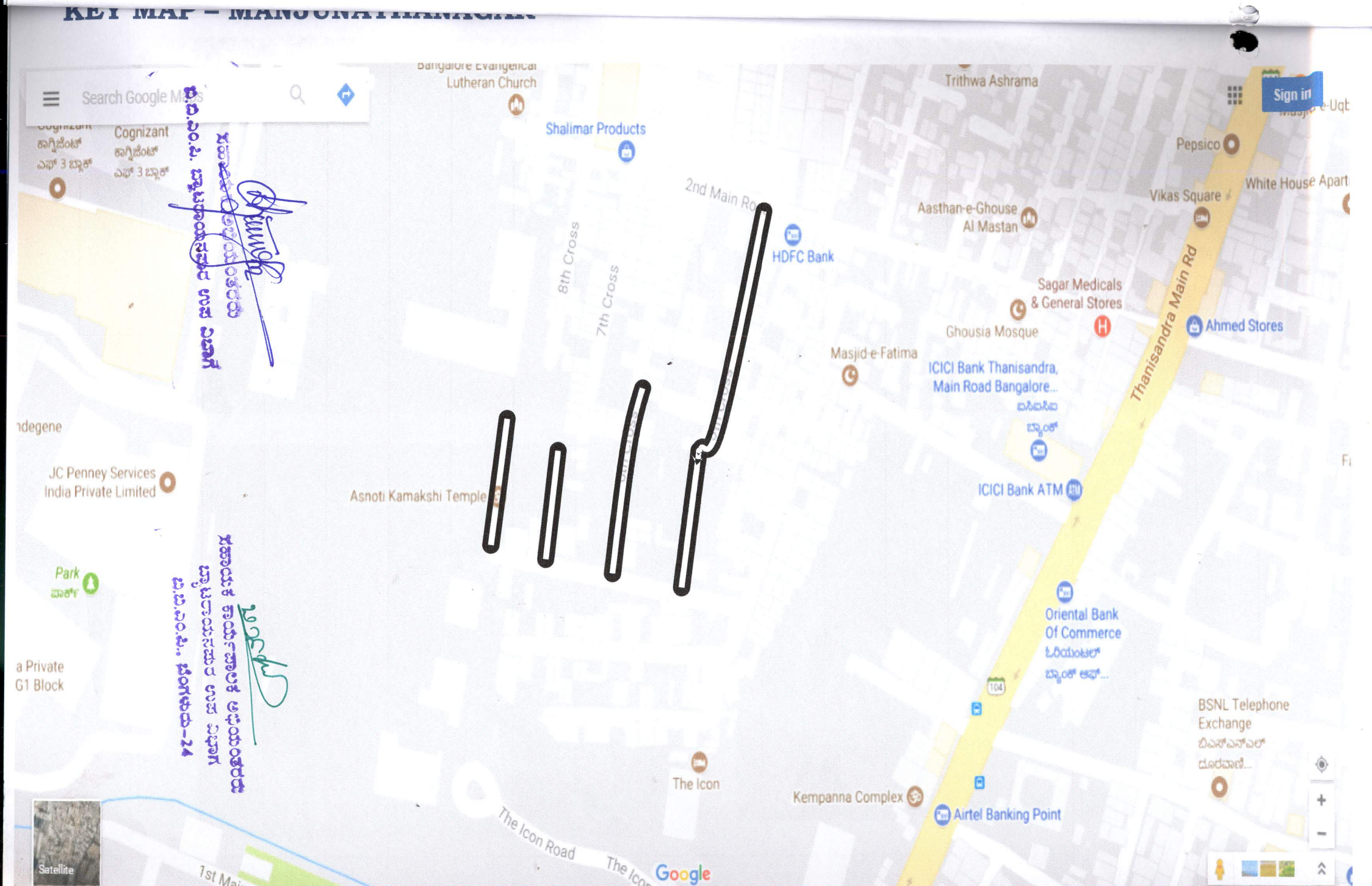
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

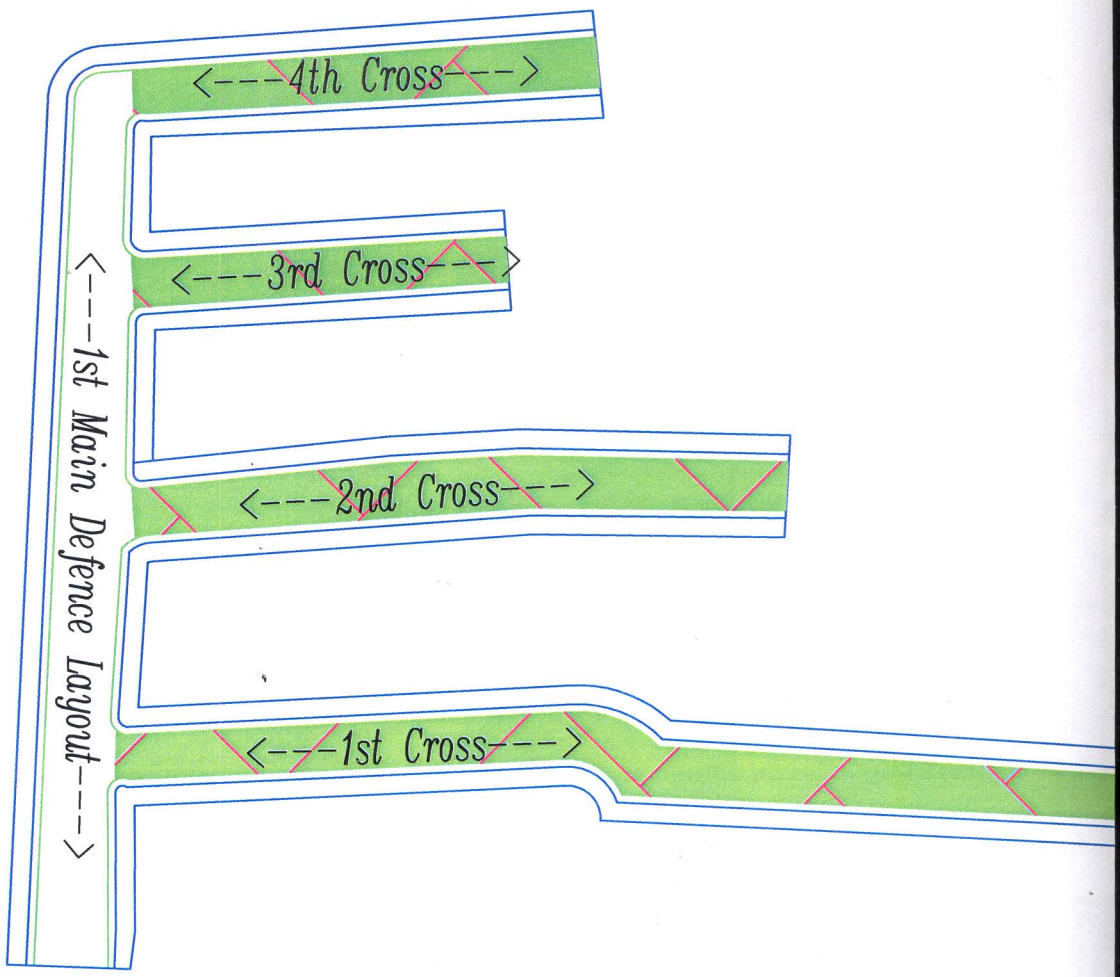
ಸಹಾಯಕ ~~ಕಾರ್ಯ ಪಾಲಕ~~ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

KEY MAP – MANJUNATHANAGAR



BRUHAT BANG

Improvements to Roads and Drains at Manjunatha N



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NOTE:-

1. ALL DIMENSION & LEVELS ARE Mts. UNLESS OTHERWISE MENTIONED.

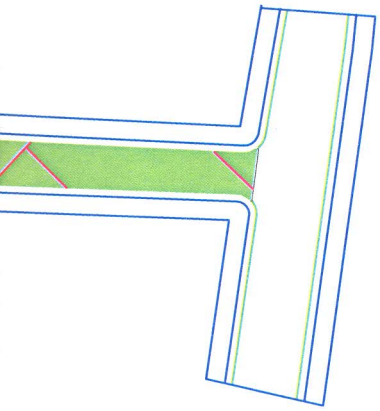
DATE	No. OF PRINTS	PRINTS ISSUED TO	SIGN

DATE	REVISION	DESCRIPTIONS	SIGN

LORE MAHANAGARA PALIKE

gara in Ward No 06 Byatarayanapura Sub Division

Road Name	Length
Defence Layout	
1st Cross	202m
2nd Cross	75m
3rd Cross	52m
4th Cross	56m



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ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

DEFENCE LAYOUT

EGEND:-

SPHALT ROAD BC

C ROAD

RAIN

TITLE: STRIP PLAN

1/1